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**Technology Center 2600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/623,575

Filing Date: January 24, 2001

Appellant(s): OHMAE ET AL.

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Jeffrey A. Wyand  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 09/25/2006 appealing from the Office action

mailed 03/27/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

|         |                 |         |
|---------|-----------------|---------|
| 5823788 | Lemelson et al. | 10-1998 |
| 5453015 | Vogel           | 09-1995 |
| 5249044 | Van Kohorn      | 09-1993 |

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 29, 31-36 and 38-69 rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson et al. (US 5,823,788) in view of Van Kohorn (US 5,249,044) and further in view of Vogel (US 5,453,015).

Lemelson discloses an interactive educational system where a student's participation may be verified and the student's progress may be tracked.

In regard to claims 29 and 33, the claimed limitation of "entry means through which a viewer of an audiovisual program enters a confirmation code to the audiovisual program, each time a viewing confirmation code is presented to the

"viewer" and "the viewing confirmation code entered being transmitted to a principal who authenticates viewing of the audiovisual program" is met by Figures 1-2. "After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66- 67; Col 6, Lines 1-10). Where the principal is the operator of the base station 11. The claimed limitation of "the confirmation viewing code being presented by a program- providing principle at a time specific to the audiovisual program" is met by Figure 8.

"Returning to step 434, if the microprocessor 40 determines in that step that the message pertains to setting response timer parameters, it sequences to step 442, in which a response timer (not shown) is set to control, for example, the allowed time for particular student(s) or all students to respond to particular question(s) or all questions" (Col 13, Lines 47-52). The user presents the response to a particular program, which is represented by a code. The claimed limitation of "transmitting means for transmitting to the principal who authenticates viewing of the audiovisual program the viewing confirmation code entered and time information corresponding to the viewing confirmation code" is met by Figures 3 and 7. The "microprocessor 40

determines in step 391 that the output message buffer enabled flag is clear, indicating that the message buffer does not contain a previous unacknowledged message, it loads the information into the output buffer and adds time and identifier codes obtained from the identifier store 32 (step 393) and sets the output message buffer enabled flag (step 395). Thereafter, the transceiver 33 can transmit the message to the base station, and the microprocessor 40 will return to step 375 to await new input" (Col 11, Lines 19-28).

Lemelson fails to disclose a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program.

Van Kohorn teaches a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program so as to act as a safeguard against cheating (See Col 5-6, Lines 52-4; Col 6, Lines 23-45; Col 6, Lines 23-45). Consequently, it would have been obvious to one of ordinary skill in the art to modify Lemelson with a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program for the stated advantage.

The combined teaching of Lemelson and Van Kohorn fails to explicitly disclose, "for comparing the time information with the time specific to the respective audiovisual program."

The Vogel reference teaches "for comparing the time information with the time specific to the respective audiovisual program" so as to verify that responses are recorded within a defined time window to protect against cheating (Col 8, Lines

5-40; Col 11, Lines 10-21). Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching with "for comparing the time information with the time specific to the respective audiovisual program" so as to verify that responses are recorded within a defined time window to protect against cheating.

In regard to claim 31, the claimed limitation that the "entry means includes an input interface of a computer, and the time information corresponding to the viewing confirmation code is obtained from a clock function of the computer" is met by Figures 3 and 4. The input interface is met by the student keypad 23 of Figure 3.

If "the microprocessor 40 determines in step 391 that the output message buffer enabled flag is clear, indicating that the message buffer does not contain a previous unacknowledged message, it loads the information into the output buffer and adds time and identifier codes obtained from the identifier store 32 (step 393) and sets the output message buffer enabled flag (step 395). Thereafter, the transceiver 33 can transmit the message to the base station, and the microprocessor 40 will return to step 375 to await new input" (Col 11, Lines 19-28). The clock function of the computer is met by the time code generator 39 of Figure 4.

In regard to claim 32, the combined teaching discloses an interactive education system and method. The reference discloses the transmission of audiovisual programs over a network. "The instructor is provided with a computer- or

microprocessor-controlled base station, and each student is provided with an electronic communicator as an input device which is linked to the base computer by a communication network or link such as one employing one or more wires, optical fibers, radio links, infrared links, LANs (local area networks), WANs (wide area networks) or the like" (Col 1, Lines 41- 48).

The reference fails to explicitly disclose that the audiovisual program is a broadcast program.

OFFICIAL NOTICE is taken that it is notoriously well known in the art to transmit an audiovisual program as a broadcast program so as to utilize the far-reaching infrastructure of the broadcast system. Consequently, it would have been obvious to one of ordinary skill in the art to implement combined teaching with transmitting an audiovisual program as a broadcast program so as to utilize the far-reaching infrastructure of the broadcast system.

In regard to claim 34, the claimed limitation that "the transmission by the transmitting means is made through a computer-readable medium" is met by Figure 1.

"The instructor is provided with a computer- or microprocessor-controlled base station, and each student is provided with an electronic communicator as an input device which is linked to the base computer by a communication network or link such as one employing one or more wires, optical fibers, radio links, infrared

links, LANs (local area networks), WANs (wide area networks) or the like" (Col 1, Lines 41-48).

In regard to claim 35, the Lemelson reference discloses an interactive education system and method.

The reference fails to explicitly disclose that the confirmation code is transmitted at any time.

OFFICIAL NOTICE is taken that it is notoriously well known in the art to transmit information at any time so as to reduce the burden on the network. Consequently, it would have been obvious to one of ordinary skill in the art to implement Lemelson with the confirmation code is transmitted at any time so as to reduce the burden on the network.

In regard to claim 36, the claimed limitation that "the audiovisual program is provided through a reproducible medium" is met by Figure 3.

"The program/data memory 31 stores a program and provides additional storage space (such as RAM storage) for holding data to be used in connection with the program, such as storing Student responses prior to transmission to the base station 11" (Col 5, Lines 59-63). Where the RAM storage is a reproducible medium.

In regard to claim 37, the combined teaching reference discloses an interactive education system and method. The reference fails to explicitly disclose if

reproduction of the reproducible medium is interrupted temporarily, the transmitting means transmits a medium interruption code.

OFFICIAL NOTICE is taken that it is notoriously well known in the art to send feedback indicating an error in transmission so as to notify the send of a problem. Consequently, it would have been obvious to one of ordinary skill in the art to implement the combined teaching with feedback indicating an error in transmission so as to notify the send of a problem.

In regard to claim 38, the claimed limitation of "code presenting means for presenting a viewing confirmation code specific to a respective audiovisual program" is met by Figure 8;

"Returning to step 434, if the microprocessor 40 determines in that step that the message pertains to setting response timer parameters, it sequences to step 442, in which a response timer (not shown) is set to control, for example, the allowed time for particular student(s) or all students to respond to particular question(s) or all questions" (Col 13, Lines 47-52). The user presents the response to a particular program, which is represented by a code. The input device of the disclosed system meets the code presenting means, because the user uses the input device to present the response to the system.

In regard to claim 39, the claimed limitation of "means for calculating an entry time interval of the viewing confirmation code from the entry time point transmitted

from the audiovisual terminal as recited in claim 29" is met by Figures 3 and 4. "Returning to step 434, if the microprocessor 40 determines in that step that the message pertains to setting response timer parameters, it sequences to step 442, in which a response timer (not shown) is set to control, for example, the allowed time for particular student(s) or all students to respond to particular question(s) or all questions" (Col 13, Lines 47-52). Also, the "microprocessor 40 determines in step 391 that the output message buffer enabled flag is clear, indicating that the message buffer does not contain a previous unacknowledged message, it loads the information into the output buffer and adds time and identifier codes obtained from the identifier store 32 (step 393) and sets the output message buffer enabled flag (step 395). Thereafter, the transceiver 33 can transmit the message to the base station, and the microprocessor 40 will return to step 375 to await new input" (Col 11, Lines 19-28).

The reference fails to explicitly disclose "means for comparing the entry time interval calculated by the means" or "means for determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range".

The Vogel reference teaches "means for comparing the entry time interval calculated by the means" and "means for determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating (Col 8, Lines 5-40; Col 11,

Lines 10-21). Consequently, it would have been obvious to one of ordinary skill in the art to modify Lemelson with "means for comparing the entry time interval calculated by the means" and "means for determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating.

In regard to claim 40, Lemelson reference discloses an interactive education system and method.

The reference fails to explicitly disclose "means for comparing an entry time point of a viewing confirmation code transmitted from the audiovisual terminal as recited in claim 29, with an elapsed time from a base time, of the viewing confirmation code presented on the audiovisual terminal" or "means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if an entry time point is in agreement with the elapsed time, within a range".

The Vogel reference teaches "means for comparing the entry time interval calculated by the means" or "means for determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating (Col 8, Lines 5-40; Col 11, Lines 10-21). Consequently, it would have been obvious to one of ordinary skill in the art to modify Lemelson with "means for comparing the entry time interval

calculated by the means" and "means for determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating.

In regard to claim 41, the claimed limitation of "a program viewing result file for storing a viewing confirmation code transmitted from the audiovisual terminal as recited in claim 29" is met by Figure 1.

"By transmitting both the station identifier as well as the student's response to the base station 11, the base station 11 can generate response statistics not only for the class as a whole, but also for individual students in the class, so that base station 11 can provide information as to the individual student's progress in the class to the instructor" (Col 4, Lines 16-22).

The reference fails to explicitly disclose that the "viewing confirmation code" or the student responses are stored in a file.

OFFICIAL NOTICE is taken that it is notoriously well known in the art to store information in the form of a file so as to recall the data at a later time. Consequently, it would have been obvious to one of ordinary skill in the art to implement the combined teaching with storing the "viewing confirmation code" or the student responses as a file so as to recall the data at a later time. It is implied that there is a program authentication pattern storage means in order to compare the program authentication pattern with the "viewing confirmation code" or the student responses

so as to determine if the "viewing confirmation code" or the student responses are correct.

In regard to claim 42, the Lemelson reference discloses an interactive education system and method.

The reference fails to explicitly disclose "means for comparing the entry time interval transmitted from the audiovisual terminal as recited in claim 29, with a presentation interval of the viewing confirmation code presented on the audiovisual terminal" or "means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range".

The Vogel reference teaches "means for comparing the entry time interval transmitted from the audiovisual terminal as recited in claim 29, with a presentation interval of the viewing confirmation code presented on the audiovisual terminal" and "means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating (Col 8, Lines 5- 40; Col 11, Lines 10-21). Consequently, it would have been obvious to one of ordinary skill in the art to modify Lemelson with "means for comparing the entry time interval transmitted from the audiovisual terminal as recited in claim 29, with a presentation interval of the viewing confirmation code presented on the audiovisual terminal" and "means for determining, from the means for comparing, that the viewer is viewing a

respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating.

In regard to claim 43, the claimed limitation of "entry means through which a viewer of an audiovisual program enters a confirmation code to the audiovisual program, each time a viewing confirmation code is presented to the viewer" and "the viewing confirmation code entered being transmitted to a principal who authenticates viewing of the audiovisual program" is met by Figures 1-2.

"After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66-67; Col 6, Lines 1-10). Where the principal is the operator of the base station 11.

The claimed limitation of "the confirmation viewing code being presented by a program-providing principle at a time specific to the audiovisual program" is met by Figure 8.

"Returning to step 434, if the microprocessor 40 determines in that step that the message pertains to setting response timer parameters, it sequences to step 442, in which a response timer (not shown) is set to control, for example, the allowed time for particular student(s) or all students to respond to particular question(s) or all questions" (Col 13, Lines 47-52). The user presents the response to a particular program, which is represented by a code. The claimed limitation of "means for storing the viewing confirmation code entered and time information corresponding presentation and entry of the viewing confirmation code" is met by Figure 3. "The program/data memory 31 stores a program and provides additional storage space (such as RAM storage) for holding data to be used in connection with the program, such as storing student responses prior to transmission to the base station 11" (Col 5, Lines 59-63). The claimed limitation of "means for transmitting, after ending of the audiovisual program, from the means of storing, the viewing confirmation code and the time information from the means for storing and corresponding to the viewing confirmation code, to the principal" is met by Figures 3 and 7. The "microprocessor 40 determines in step 391 that the output message buffer enabled flag is clear, indicating that the message buffer does not contain a previous unacknowledged message, it loads the information into the output buffer and adds time and identifier codes obtained from the identifier store 32 (step 393) and sets the output message buffer enabled flag (step 395). Thereafter, the transceiver 33 can transmit the message to the base station, and the microprocessor 40 will return to step 375 to await new input" (Col 11, Lines 19-28).

Lemelson fails to disclose a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program.

Van Kohorn teaches a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program so as to act as a safeguard against cheating (See Col 5-6, Lines 52-4; Col 6, Lines 23-45; Col 6, Lines 23-45). Consequently, it would have been obvious to one of ordinary skill in the art to modify Lemelson with a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program for the stated advantage.

The combined teaching fails to explicitly disclose, "for comparing the time information with the time specific to the respective audiovisual program."

The Vogel reference teaches "for comparing the time information with the time specific to the respective audiovisual program" so as to verify that responses are recorded within a defined time window to protect against cheating (Col 8, Lines 5-40; Col 11, Lines 10- 21). Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching with "for comparing the time information with the time specific to the respective audiovisual program" so as to verify that responses are recorded within a defined time window to protect against cheating.

In regard to claim 44, the claimed limitation of "code presenting means for presenting a viewing confirmation code specific to a respective audiovisual program"

is met by Figure 8. "Returning to step 434, if the microprocessor 40 determines in that step that the message pertains to setting response timer parameters, it sequences to step 442, in which a response timer (not shown) is set to control, for example, the allowed time for particular student(s) or all students to respond to particular question(s) or all questions" (Col 13, Lines 47-52). The user presents the response to a particular program, which is represented by a code. The input device of the disclosed system meets the code presenting means, because the user uses the input device to present the response to the system.

In regard to claim 45, the claimed limitation of "means for calculating an entry time interval of the viewing confirmation code from the entry time point transmitted from the audiovisual terminal as recited in claim 29" is met by Figures 3 and 4. "Returning to step 434, if the microprocessor 40 determines in that step that the message pertains to setting response timer parameters, it sequences to step 442, in which a response timer (not shown) is set to control, for example, the allowed time for particular student(s) or all students to respond to particular question(s) or all questions" (Col 13, Lines 47-52).

Also, the "microprocessor 40 determines in step 391 that the output message buffer enabled flag is clear, indicating that the message buffer does not contain a previous unacknowledged message, it loads the information into the output buffer and adds time and identifier codes obtained from the identifier store 32 (step 393) and sets the output message buffer enabled flag (step 395). Thereafter, the

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transceiver 33 can transmit the message to the base station, and the microprocessor 40 will return to step 375 to await new input" (Col 11, Lines 19-28).

The reference fails to explicitly disclose "means for comparing the entry time interval calculated by the means" or "means for determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range".

The Vogel reference teaches "means for comparing the entry time interval calculated by the means" or "means for determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating (Col 8, Lines 5-40; Col 11, Lines 10-21). Consequently, it would have been obvious to one of ordinary skill in the art to modify Lemelson with "means for comparing the entry time interval calculated by the means" and "means for determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating.

In regard to claim 46, the claimed limitation of "means for determining scores based on a comparison carried out by the means for comparing" is met by Figure 4. "The base station 11 also includes several response score computer elements 52 through 54 for generating individual response information and class response

statistics for the students in response to questions presented by the instructor. In particular, the base station 11 includes a student score generation element 52 including a student score computer 55 and a private memory 56 that stores individual responses from the students and for use by the student score computer in generating scoring information for the instructor' (Col 6, Lines 66-67; Col 7, Lines 1-7).

In regard to claim 47, the Lemelson reference discloses an interactive education system and method.

The reference fails to explicitly disclose "means for comparing an entry time point of a viewing confirmation code transmitted from the audiovisual terminal as recited in claim 43, with an elapsed time from a base time, of the viewing confirmation code presented on the audiovisual terminal" or "means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if an entry time point is in agreement with the elapsed time, within a range".

The Vogel reference teaches "means for comparing an entry time point of a viewing confirmation code transmitted from the audiovisual terminal as recited in claim 43, with an elapsed time from a base time, of the viewing confirmation code presented on the audiovisual terminal" and "means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if an entry time point is in agreement with the elapsed time, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating (Col 8, Lines 5-40; Col 11, Lines 10-21). Consequently, it would have been obvious

to one of ordinary skill in the art to modify Lemelson with "means for comparing an entry time point of a viewing confirmation code transmitted from the audiovisual terminal as recited in claim 43, with an elapsed time from a base time, of the viewing confirmation code presented on the audiovisual terminal" and "means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if an entry time point is in agreement with the elapsed time, within a "range" so as to verify that responses are recorded within a defined time window to protect against cheating.

In regard to claim 48, the claimed limitation of "a program viewing result file for storing a viewing confirmation code transmitted from the audiovisual terminal as recited in claim 43" is met by Figure 1. "By transmitting both the station identifier as well as the student's response to the base station 11, the base station 11 can generate response statistics not only for the class as a whole, but also for individual students in the class, so that base station 11 can provide information as to the individual student's progress in the class to the instructor" (Col 4, Lines 16-22). The combined teaching fails to explicitly disclose that the "viewing confirmation code" or the student responses are stored in a file.

OFFICIAL NOTICE is taken that it is notoriously well known in the art to store information in the form of a file so as to recall the data at a later time. Consequently, it would have been obvious to one of ordinary skill in the art to implement the combined teaching with storing the "viewing confirmation code" or the student responses as a file so as to recall the data at a later time. It is implied that there is

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program authentication pattern storage means in order to compare the program authentication pattern with the "viewing confirmation code" or the student responses so as to determine if the "viewing confirmation code" or the student responses are correct.

In regard to claim 49, the Lemelson reference discloses an interactive education system and method.

The reference fails to explicitly disclose "means for comparing the entry time interval transmitted from the audiovisual terminal as recited in claim 43, with a presentation interval of the viewing confirmation code presented on the audiovisual terminal" or "means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range".

The Vogel reference teaches "means for comparing the entry time interval transmitted from the audiovisual terminal as recited in claim 29, with a presentation interval of the viewing confirmation code presented on the audiovisual terminal" and "means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating (Col 8, Lines 5- 40; Col 11, Lines 10-21). Consequently, it would have been obvious to one of ordinary skill in the art to modify Lemelson with "means for comparing the entry time interval

transmitted from the audiovisual terminal as recited in claim 29, with a presentation interval of the viewing confirmation code presented on the audiovisual terminal" and "means for determining, from the means for comparing, that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the presentation interval, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating.

Claims 50 and 65-67 are met by that discussed above for claims 29 and 43.

In regard to claim 51, the claimed limitation of "providing an audiovisual program" is met by Figure 1-3. The claimed limitation "presenting a viewing confirmation code for the audiovisual program to a viewer of the audiovisual program, the viewing confirmation code being presented at a time specific to the audiovisual program" is met by Figures 3 and 4.

The Lemelson reference presents a question indicative of the "viewing confirmation code" which is specific to the program watched. The claimed limitation of "receiving from the audiovisual terminal a transmission with respect to the viewing confirmation code entered and time information corresponding to the viewing confirmation code entered" is met by Figure 4. "After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a

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code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66-67; Col 6, Lines 1-10).

Lemelson fails to disclose a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program.

Van Kohorn teaches a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program so as to act as a safeguard against cheating (See Col 5-6, Lines 52-4; Col 6, Lines 23-45; Col 6, Lines 23-45). Consequently, it would have been obvious to one of ordinary skill in the art to modify Lemelson with a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program for the stated advantage.

The combined teaching fails to explicitly disclose, "determining whether the viewer is viewing a respective broadcast program based upon the viewing confirmation code received and the time information."

The Vogel reference teaches "determining whether the viewer is viewing a respective broadcast program based upon the viewing confirmation code received and the time information" so as to verify that responses are recorded within a defined time window to protect against cheating (Col 8, Lines 5-40; Col 11, Lines 10-21). Consequently, it would have been obvious to one of ordinary skill in the art to

modify the combined teaching with "determining whether the viewer is viewing a respective broadcast program based upon the viewing confirmation code received and the time information" so as to verify that responses are recorded within a defined time window to protect against cheating.

In regard to claim 52, the claimed limitation of "audiovisual programs for education are provided to learners" is met by Figure 1. The claimed limitation "viewing by the learners is authenticated with the viewing authentication method as recited in claim 51" is met by Figures 1-2. "After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66-67; Col 6, Lines 1-10).

In regard to claim 53, the claimed limitation of "providing an audiovisual program" is met by Figure 1-3. The claimed limitations "presenting a viewing confirmation code for the audiovisual program to a viewer of the audiovisual program, the viewing confirmation code being presented at a time specific to the

audiovisual program" and "the viewing confirmation code entered and time information corresponding thereto are stored in an audiovisual terminal" are met by Figures 3 and 4. The Lemelson reference presents a question indicative of the "viewing confirmation code" which is specific to the program watched. The "microprocessor 40 determines in step 391 that the output message buffer enabled flag is clear, indicating that the message buffer does not contain a previous unacknowledged message, it loads the information into the output buffer and adds time and identifier codes obtained from the identifier store 32 (step 393) and sets the output message buffer enabled flag (step 395). Thereafter, the transceiver 33 can transmit the message to the base station, and the microprocessor 40 will return to step 375 to await new input" (Col 11, Lines 19-28). The claimed limitation of "receiving the viewing confirmation code stored and the time information corresponding thereto transmitted from the audiovisual terminal after ending of the audiovisual program" is met by Figure 4. "After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66-67; Col 6, Lines 1-10).

Lemelson fails to disclose a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program.

Van Kohorn teaches a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program so as to act as a safeguard against cheating (See Col 5-6, Lines 52-4; Col 6, Lines 23-45; Col 6, Lines 23-45). Consequently, it would have been obvious to one of ordinary skill in the art to modify Lemelson with a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program for the stated advantage.

The combined teaching fails to explicitly disclose, "determining whether the viewer is viewing the audiovisual program based upon the viewing confirmation code received and the time information."

The Vogel reference teaches "determining whether the viewer is viewing a respective broadcast program based upon the viewing confirmation code received and the time information" so as to verify that responses are recorded within a defined time window to protect against cheating (Col 8, Lines 5-40; Col 11, Lines 10-21). Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching with "determining whether the viewer is viewing a respective broadcast program based upon the viewing confirmation code received and the time information" so as to verify that responses are recorded within a defined time window to protect against cheating.

In regard to claim 54, the claimed limitation of "audiovisual programs for education are provided to learners" is met by Figure 1. The claimed limitation "viewing by the learners is authenticated with the viewing authentication method as recited in claim 53" is met by Figures 1-2. "After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66-67; Col 6, Lines 1-10).

In regard to claim 55, the claimed limitation of "providing an audiovisual program" is met by Figure 1-3. The claimed limitations "presenting a viewing confirmation code for the audiovisual program to a viewer of the audiovisual program, the viewing confirmation code being presented at a time specific to the audiovisual program" and "the viewing confirmation code entered and time information corresponding thereto are stored in an audiovisual terminal" are met by Figures 3 and 4. The Lemelson reference presents a question indicative of the "viewing confirmation code" which is specific to the program watched. The "microprocessor 40 determines in step 391 that the output message buffer enabled

flag is clear, indicating that the message buffer does not contain a previous unacknowledged message, it loads the information into the output buffer and adds time and identifier codes obtained from the identifier store 32 (step 393) and sets the output message buffer enabled flag (step 395). Thereafter, the transceiver 33 can transmit the message to the base station, and the microprocessor 40 will return to step 375 to await new input" (Col 11, Lines 19-28). The claimed limitation of "receiving a transmission with respect to the viewing confirmation code entered and an entry time point of the viewing confirmation code from the audiovisual terminal" is met by Figure 4. "After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66-67; Col 6, Lines 1-10). The claimed limitation of "calculating an entry time interval of the viewing confirmation code from the entry time point transmitted from the audiovisual terminal as recited in claim 29" is met by Figures 3 and 4. "Returning to step 434, if the microprocessor 40 determines in that step that the message pertains to setting response timer parameters, it sequences to step 442, in which a response timer (not shown) is set to control, for example, the allowed time for particular

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student(s) or all students to respond to particular question(s) or all questions" (Col 13, Lines 47-52). Also, the "microprocessor 40 determines in step 391 that the output message buffer enabled flag is clear, indicating that the message buffer does not contain a previous unacknowledged message, it loads the information into the output buffer and adds time and identifier codes obtained from the identifier store 32 (step 393) and sets the output message buffer enabled flag (step 395). Thereafter, the transceiver 33 can transmit the message to the base station, and the microprocessor 40 will return to step 375 to await new input" (Col 11, Lines 19-28).

Lemelson fails to disclose a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program.

Van Kohorn teaches a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program so as to act as a safeguard against cheating (See Col 5-6, Lines 52-4; Col 6, Lines 23-45; Col 6, Lines 23-45). Consequently, it would have been obvious to one of ordinary skill in the art to modify Lemelson with a viewing code that is identical to the viewing code where the code is transmitted after the presentation of the program for the stated advantage.

The combined teaching fails to explicitly disclose "comparing the entry time interval calculated with a presented interval of the viewing confirmation code" or "determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the interval of the viewing confirmation code, within a range".

The Vogel reference teaches "comparing the entry time interval calculated with a presented interval of the viewing confirmation code" and "determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the interval of the viewing confirmation code, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating (Col 8, Lines 5-40; Col 11, Lines 10-21). Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching with "comparing the entry time interval calculated with a presented interval of the viewing confirmation code" and "determining that the viewer is viewing a respective broadcast program if the entry time interval is in agreement with the interval of the viewing confirmation code, within a range" so as to verify that responses are recorded within a defined time window to protect against cheating.

In regard to claim 56, the claimed limitation of "audiovisual programs for education are provided to learners" is met by Figure 1. The claimed limitation "viewing by the learners is authenticated with the viewing authentication method as recited in claim 53" is met by Figures 1-2. "After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the

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student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66-67; Col 6, Lines 1-10).

Claims 57, 61, 63 and 68-69 are met by that discussed above for claims 51, 53 and 55.

In regard to claim 58, the claimed limitation of "audiovisual programs for education are provided to learners" is met by Figure 1. The claimed limitation "viewing by the learners is authenticated with the viewing authentication method as recited in claim 53" is met by Figures 1-2. "After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66-67; Col 6, Lines 1-10).

In regard to claim 59, the claimed limitations are met by that discusses above for claims 51, 53 and 55. However, the combined teaching fails to explicitly disclose that the "viewing confirmation code" or the student responses are stored in a file.

OFFICIAL NOTICE is taken that it is notoriously well known in the art store information in the form of a file so as to recall the data at a later time. Consequently, it would have been obvious to one of ordinary skill in the art to implement the combined teaching with storing the "viewing confirmation code" or the student responses as a file so as to recall the data at a later time. It is implied that there is program authentication pattern storage means in order to compare the program authentication pattern with the "viewing confirmation code" or the student responses so as to determine if the "viewing confirmation code" or the student responses are correct.

In regard to claim 60, the claimed limitation of "audiovisual programs for education are provided to learners" is met by Figure 1. The claimed limitation "viewing by the learners is authenticated with the viewing authentication method as recited in claim 53" is met by Figures 1-2. "After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66-67; Col 6, Lines 1-10).

In regard to claim 62, the claimed limitation of "audiovisual programs for education are provided to learners" is met by Figure 1. The claimed limitation "viewing by the learners is authenticated with the viewing authentication method as recited in claim 53" is met by Figures 1-2. "After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66-67; Col 6, Lines 1-10).

In regard to claim 64, the claimed limitation of "audiovisual programs for education are provided to learners" is met by Figure 1. The claimed limitation "viewing by the learners is authenticated with the viewing authentication method as recited in claim 53" is met by Figures 1-2. "After the student inputs a response or a series of responses and enables the input device 13(s) to transmit it to the base station 11, the microprocessor 30 transmits to the base station 11 both response indicia representative of the response (which may be the response itself and/or a code identifying the response) and the identifier code provided by the identifier memory 32, so that the base station 11 can associate the response indicia to the particular student (or to the input device 13(s), which, in turn, is assigned to the

- student) and thereby disambiguate response indicia provided by each student" (Col 5, Lines 66-67; Col 6, Lines 1-10).
2. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson et al. in view of Van Kohorn and further in view of Vogel and further in view of Bates et al. (US Pat No 6,681,396).

In regard to claim 37, the aforementioned combined teaching discloses the transmission of codes from the remote station to the base station.

The combined teaching fails to disclose the generation of an interruption code.

Bates teaches creating interruption information or an interruption code so as to allow the user to resume the viewing of a program (Col 5, Lines 32-61; Col 6, Lines 18-46). Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching with the generation of an interruption code for the stated advantage.

#### **(10) Response to Argument**

Von Kohorn is Non-Analogous Art that cannot be applied in any rejection pursuant to 35 USC 103.

Appellant argues that Von Kohorn is not pertinent to the problem solved in the invention. There is no relationship between determining attentiveness of

students and raising awareness of product discount coupons. Therefore, Von Kohorn fails both the alternative analogous art tests, is not analogous art to the invention, and cannot be applied in an obviousness rejection of pending claim.

In response, the Examiner respectfully disagrees with Appellant because a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). In this instant, the combination of prior art teaches all the structural limitations of the claim, as discussed in the previous Office Action.

Moreover, Lemelson teaches all the structural limitations of the claim such as an *interactive system* for education where a student's participation using control keypad/student input device (Lemelson 's student input device 13) may be verified and the student's progress may be tracked, i.e., interactive system. On the other hand, Von Kohorn also discloses an *interactive system* within a television broadcast system (Col 3, Lines 32-38 and 53-59) in which it monitors user action and attentiveness of user in response to a product of interest that is presented to user for further actions in using an input device (Van Kohorn , el. 14). In view of that, since both references teach at least an "interactive" system that both use a "similar" input device (Van Kohorn , el. 14 and Lemelson 's student input device 13) for inputting data in response to a message, i.e., question/message of interest, that is presented to the user for further actions, i.e., response to the question/message of interest.

Thus, both references Von Kohorn and Lemelson are analogous art for the at least above reasons.

**Claim 29**

Appellant further argues, (Appeal Brief page 14, last paragraph- page 15, lines 10), "In Lemelson a substantive question is presented and a substantive answer is expected. Even if the answer to the question is selected from a group of proposed answers, i.e., is a multiple-choice question, or if the answer is simply a "yes" or "no", the answer is clearly different from the question.

If the presentation of the viewing confirmation code in the invention is considered to be a question, then the correct "answer" is the question, i.e., entry of an identical reproduction of the viewing confirmation code presented. Lemelson never discloses such an arrangement and cannot even suggest such an arrangement because it would be contrary to the intended and desired operation of the Lemelson system.

If, in the Lemelson system, all of the answers received were identical to the questions, the lecturer in Lemelson could gather no information as to how well the material being presented was being comprehended and could not determine whether to make some adjustment in the presentation of that material. In other words, Lemelson teaches away from the claimed invention."

In response, the Examiner respectfully agrees with Appellant that Lemelson discloses a substantive questions are presented with corresponding substantive answers are expected and the answer to the question is selected from a group of proposed answers, i.e., is a multiple-choice answer, or if the answer is simply a "yes" or "no"; However, the Examiner disagrees with Appellant assertion that Lemelson teaches away from the claimed invention because Appellant misconstrues Lemelson 's reference. It is obvious that the answer from a group of proposed answers is different from the question; However, the student uses an input device, i.e., Lemelson Fig. 2, for inputting the selected answer from a group of proposed answers. The selected answer is sending back to the lecturer and the selected answer is identical to one answer of the group of proposed answers, i.e., is a multiple-choice answer. As such, Appellant clearly misconstrues Lemelson 's reference and the Examiner asserts that Lemelson does NOT teach away from the claimed invention, as alleged by Appellant.

Appellant further argues (Appeal Brief page 17, lines 4-9), "It follows from the foregoing descriptions of Vogel and Von Kohorn that neither Vogel nor Von Kohorn can suggest modification of Lemelson to send back to the lecturer a code identical to the code sent by the lecturer and thereby suggest that aspect of the invention.""

In response, the Examiner respectfully disagrees with Appellant because Lemelson suggests at least one aspect of Appellant's invention, i.e., providing a way of verifying of users/students attentiveness based on scoring number of correct

answers/responses versus incorrect answers/response (Col. 5, lines 65-Col. 6, lines 36) in which the inputted students' answers/responds, i.e., selected answer, is sending back to the lecturer, as above discussion.

Thus, what is missing from Lemelson is a viewing code that is identical to the presenting viewing code where the viewing code is transmitted after the presentation of the viewing code. This missing limitation is cured by Von Kohorn (Col. 5, lines 52-Col. 6, lines 4, 23-45), as discussed from the previous Office action.

#### **Claim 43**

Appellant argues, (Appeal Brief page 19, lines 10-14), "...However, the description there relates to the microprocessor 40 in Lemelson that is within the apparatus related to the teacher, not with respect to the student or viewer."

In response, the Examiner respectfully disagrees with Appellant because Appellant again misconstrues Lemelson reference. Lemelson 's microprocessor 40 (Fig. 4) is a plan view of the student input device used in student input device depicted in Fig. 3, see Col. 2, lines 37-38.

Appellant further argues (Appeal Brief page 19, lines 12-14), "There is no description in the cited portion of Lemelson, or in the Final rejection, that suggest a means for transmitting the stored viewer entered data after ending of an audiovisual program."

In response, the Examiner respectfully disagrees with Applicant because limitation "an audiovisual program" is broadly interpreted as a Lemelson 's text, graphics and video information for each question (Col. 3, lines 40-43). As such after each selected answer from a question and before the beginning of next question, the stored selected answer is transmitted to the base station 11 (see Col. 5, lines 56-Col. 6, lines 10).

**Claim 50**

Appellant argues (Appeal Brief page 19, last paragraph), "claim 50 is an independent claim directed to a viewing authentication system which, as previously discussed, describes elements on the side of the principal supplying the audiovisual program."

In response, the Examiner respectfully disagrees with Appellant because claim 50 does NOT describe elements on the side of the principal supplying the audiovisual program, as alleged by Appellant.

Appellant further argues (Appeal Brief page 19, last paragraph- page 20, first paragraph), "The system includes means for receiving, from the terminal where the program is being viewed, the viewing confirmation code entered by the viewer. Further, at the principal's side, the system includes means for storing the code that was received at the viewing terminal as well as a time point corresponding to the entry of the viewing confirmation code by the viewer and a time interval related to the presentation of each code and the responsive entry. As explained in the patent

application, that information stored on the side of the principal is employed in the analysis of the stored information to determine the viewer's attentiveness."

In response, the Examiner again asserts that claim 50 does NOT describe elements on the side of the principal supplying the audiovisual program, as argued by Appellant; therefore, Appellant argument is moot.

#### **Claims 51-64**

Appellant does not distinctly and specifically point out errors in the Examiner Office Action but merely argues (see Appeal Brief, page 20-22); therefore, the examiner asserts again that Lemelson in view of Van Kohorn and further in view of Vogel meets claims 51-64, as previously rejected (Final Office action) and further in view of the above discussion.

#### **Claim 68 and 69**

Appellant argues (page 22, line 19-25), "Claims 68 and 69 specify that viewing confirmation can be established when the viewing confirmation code entered by the viewer is not identical to, but is close to, i.e., within a range of tolerance to, the viewing confirmation code presented. There is not even an allegation within the final rejection that this claim limitation is disclosed anywhere within the three publications applied in rejecting those two independent claims."

In response to appellant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant

relies (i.e., viewing confirmation can be established when the viewing confirmation code entered by the viewer is not identical to, but is close to, i.e., within a range of tolerance to, the viewing confirmation code presented) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Hai Tran



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